Progress Energy

November 23, 2010

Jocelyn Boyd, Esquire
Chief Clerk and Administrator
South Carolina Public Service Commission
Post Office Drawer 11649
Columbia, South Carolina 29211

Re: Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.
Power Plant Performance Report
Docket No. 2006-224-E

Dear Mrs. Boyd:

Enclosed is the Power Plant Performance Report for Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. for the month of October 2010.

Sincerely,

Len S. Anthony (by dhs)

Len S. Anthony
General Counsel
Progress Energy Carolinas, Inc.

LSA/dhs
Attachment
45612

c: John Flitter (ORS)

Progress Energy Service Company, LLC
P.O. Box 1551
Raleigh, NC 27602

October 2010

The following units had no off-line outages during the month of October:

Brunswick Unit 1
Brunswick Unit 2
Mayo Unit 1
Roxboro Unit 3
Roxboro Unit 4

October 2010

Harris Unit 1

Full Scheduled Outage

A. Duration: The unit was taken out of service at 0:23 on October 2, and remained offline for the remainder of the month. The unit was offline for 719 hours and 37 minutes during the month of October.

B. Cause: Scheduled Refueling Outage

C. Explanation: The unit was taken out of service for a scheduled refueling outage. In addition to normal refueling activities, maintenance, and inspections, replacement of the electric generator and refurbishment of the unit's cooling tower are scheduled for completion. The cooling tower project is expected to add up to 8 MWs to the unit's summer capacity. The electric generator replacement will support capacity increases in future outages.

D. Corrective Action: Planned outage activities were in progress at the end of October.

October 2010

Robinson Unit 2

Full Forced Outage

A. Duration: The unit was taken out of service at 0:13 on October 7, and remained offline for the remainder of the month. The unit was offline for 599 hours and 47 minutes during the month of October.

B. Cause: Automatic reactor trip due to single loop low cooling flow

C. Explanation: The "C" Reactor Coolant Pump (RCP) motor tripped due to an instantaneous overcurrent trip of load breaker 52/14. This resulted in a single loop low cooling flow, which initiated an automatic reactor scram. Investigation of breaker 52/14 revealed that the breaker had tripped due to exceeding the instantaneous current setting on the "A" and "C" phases. Breaker 52/14 was inspected and cleaned with no deficiencies noted. Preliminary investigation of the "C" RCP motor revealed burnt windings in the stator, and evidence of a small strip of insulation tape in one of the rotor vents and metal splatter on the rotor.

D. Corrective Action: During October, investigation into the RCP motor failure continued. The RCP motor was replaced and other maintenance activities were underway to prepare the unit for return to service.

October 2010

Roxboro Unit 2

Full Forced Outage

A. Duration: The unit was taken out of service at 22:46 on October 2, and was returned to service at 4:51 on October 4, a duration of 30 hours and 5 minutes.

B. Cause: Waterwall Tube Leak

C. Explanation: The unit was taken out of service to investigate and repair a tube leak in the waterwall section of the boiler.

D. Corrective Action: Maintenance activities were conducted to correct the waterwall tube leak. Upon completion of repairs, the unit was returned to service.

Full Forced Outage

A. Duration: The unit was taken out of service at 11:25 on October 10, and was returned to service at 20:56 on October 12, a duration of 57 hours and 31 minutes.

B. Cause: Generator Lockout

C. Explanation: The unit experienced a generator lockout due to vibration on the rotor collector ring.

D. Corrective Action: The unit was returned to service upon completion of corrective maintenance activities to address issues with the rotor collector ring.

Full Forced Outage

A. Duration: The unit was taken out of service at 22:48 on October 12, and was returned to service at 0:01 on October 13, a duration of 1 hour and 13 minutes.

B. Cause: Water Chemistry Issues

C. Explanation: After returning to service upon completion of maintenance activities related to the rotor collector ring, it was observed that the boiler internals were experiencing a water chemistry issue. Therefore, the unit was taken offline to address the issue.

D. Corrective Action: Adjustments were made to correct water chemistry issues in the boiler, and the unit was returned to service.

	Month of October 2010		Twelve Month Summary		See Notes*
MDC	975	MW	953	MW	1
Period Hours	744	HOURS	8,760	HOURS	
Net Generation	706,067	MWH	6,800,466	MWH	2
Capacity Factor	97.33	%	81.43	%	
Equivalent Availability	98.07	%	81.33	%	
Output Factor	97.33	%	98.73	%	
Heat Rate	10,340	BTU/KWH	10,440	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	1,382,550	16.55	3
Partial Scheduled	13,987	1.93	97,565	1.17	4
Full Forced	0	0.00	80,199	0.96	5
Partial Forced	5,346	0.74	82,689	0.99	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	725,400		8,351,930		8

* See 'Notes for Nuclear Units' filed with the January 2010 report.
** Gross of Power Agency

	Month of October 2010		Twelve Month Summary		See Notes*
MDC	953	MW	934	MW	1
Period Hours	744	HOURS	8,760	HOURS	
Net Generation	698,169	MWH	8,012,817	MWH	2
Capacity Factor	98.47	%	97.97	%	
Equivalent Availability	99.90	%	97.59	%	
Output Factor	98.47	%	99.36	%	
Heat Rate	10,579	BTU/KWH	10,620	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	107,101	1.31	3
Partial Scheduled	738	0.10	39,436	0.48	4
Full Forced	0	0.00	7,164	0.09	5
Partial Forced	10,125	1.43	78,493	0.96	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	709,032		8,179,650		8

* See 'Notes for Nuclear Units' filed with the January 2010 report.
** Gross of Power Agency

	Month of October 2010		Twelve Month Summary		See Notes*
MDC	936	MW	915	MW	1
Period Hours	744	HOURS	8,760	HOURS	
Net Generation	11,904	MWH	7,292,813	MWH	2
Capacity Factor	1.71	%	91.00	%	
Equivalent Availability	2.80	%	90.17	%	
Output Factor	52.17	%	100.80	%	
Heat Rate	10,465	BTU/KWH	10,696	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	673,562	96.72	673,562	8.40	3
Partial Scheduled	3,348	0.48	16,640	0.21	4
Full Forced	0	0.00	105,870	1.32	5
Partial Forced	7,570	1.09	18,089	0.23	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	696,384		8,015,400		8

* See 'Notes for Nuclear Units' filed with the January 2010 report.
** Gross of Power Agency

	Month of October 2010		Twelve Month Summary		See Notes*
MDC	758	MW	736	MW	1
Period Hours	744	HOURS	8,760	HOURS	
Net Generation	102,256	MWH	3,888,975	MWH	2
Capacity Factor	18.13	%	60.34	%	
Equivalent Availability	19.38	%	59.46	%	
Output Factor	93.54	%	100.25	%	
Heat Rate	12,772	BTU/KWH	10,796	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	1,644,116	25.51	3
Partial Scheduled	0	0.00	21,363	0.33	4
Full Forced	454,636	80.62	921,591	14.30	5
Partial Forced	7,060	1.25	45,973	0.71	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	563,952		6,445,900		8

* See 'Notes for Nuclear Units' filed with the January 2010 report.

	Month of October 2010		Twelve Month Summary		See Notes*
MDC	726	MW	729	MW	1
Period Hours	744	HOURS	8,760	HOURS	
Net Generation	370,163	MWH	4,820,364	MWH	2
Capacity Factor	68.53	%	75.47	%	
Equivalent Availability	100.00	%	94.32	%	
Output Factor	68.53	%	79.90	%	
Heat Rate	10,729	BTU/KWH	10,538	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	268,017	4.20	3
Partial Scheduled	0	0.00	53,366	0.84	4
Full Forced	0	0.00	5,874	0.09	5
Partial Forced	0	0.00	34,629	0.54	6
Economic Dispatch	169,981	31.47	1,204,622	18.86	7
Possible MWH	540,144		6,386,770		8

* See 'Notes for Fossil Units' filed with the January 2010 report.
** Gross of Power Agency

	Month of October 2010		Twelve Month Summary		See Notes*
MDC	671	MW	666	MW	1
Period Hours	744	HOURS	8,760	HOURS	
Net Generation	354,961	MWH	3,804,261	MWH	2
Capacity Factor	71.10	%	65.23	%	
Equivalent Availability	84.90	%	72.95	%	
Output Factor	80.74	%	86.11	%	
Heat Rate	8,726	BTU/KWH	8,992	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	20,186	4.04	1,217,977	20.88	3
Partial Scheduled	5,581	1.12	95,138	1.63	4
Full Forced	39,411	7.89	185,286	3.18	5
Partial Forced	10,200	2.04	80,826	1.39	6
Economic Dispatch	68,886	13.80	447,164	7.67	7
Possible MWH	499,224		5,831,970		8

* See 'Notes for Fossil Units' filed with the January 2010 report.

	Month of October 2010		Twelve Month Summary		See Notes*
MDC	698	MW	695	MW	1
Period Hours	744	HOURS	8,760	HOURS	
Net Generation	354,299	MWH	4,713,513	MWH	2
Capacity Factor	68.22	%	77.38	%	
Equivalent Availability	99.94	%	98.29	%	
Output Factor	68.22	%	78.13	%	
Heat Rate	10,467	BTU/KWH	10,737	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	58,905	0.97	3
Partial Scheduled	0	0.00	10,164	0.17	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	290	0.06	34,640	0.57	6
Economic Dispatch	164,723	31.72	1,274,502	20.92	7
Possible MWH	519,312		6,091,850		8

* See 'Notes for Fossil Units' filed with the January 2010 report.

	Month of October 2010		Twelve Month Summary		See Notes*
MDC	711	MW	703	MW	1
Period Hours	744	HOURS	8,760	HOURS	
Net Generation	341,677	MWH	4,725,952	MWH	2
Capacity Factor	64.59	%	76.70	%	
Equivalent Availability	100.00	%	98.25	%	
Output Factor	64.59	%	76.81	%	
Heat Rate	11,318	BTU/KWH	11,736	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	8,971	0.15	3
Partial Scheduled	0	0.00	66,980	1.09	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	0	0.00	32,349	0.52	6
Economic Dispatch	187,307	35.41	1,327,327	21.54	7
Possible MWH	528,984		6,161,930		8

* See 'Notes for Fossil Units' filed with the January 2010 report.
** Gross of Power Agency

Run Date 11/22/2010

Plant	Unit	Current MW Rating	January 2009 - December 2009	October 2010	January 2010 - October 2010
Asheville	1	196	70.87	58.16	73.17
Asheville	2	187	59.45	55.90	68.80
Cape Fear	5	148	63.73	54.56	73.99
Cape Fear	6	175	62.21	66.01	71.39
Lee	1	80	50.63	48.26	70.71
Lee	2	80	41.80	38.30	55.71
Lee	3	257	58.82	55.91	71.34
Mayo	1	726	62.45	68.53	75.54
Robinson	1	179	61.18	40.56	65.41
Roxboro	1	374	79.40	76.47	81.56
Roxboro	2	671	73.67	71.10	64.80
Roxboro	3	698	62.76	68.22	80.40
Roxboro	4	711	71.40	64.59	77.22
Sutton	1	98	39.14	41.11	49.67
Sutton	2	107	44.65	23.13	51.89
Sutton	3	411	48.01	0.00	51.70
Weatherspoon	1	49	13.92	0.00	39.91
Weatherspoon	2	49	14.93	0.00	35.08
Weatherspoon	3	79	23.59	31.51	51.06
Fossil System Total		5,275	62.52	56.57	70.17
Brunswick	1	975	97.67	97.33	77.43
Brunswick	2	953	79.50	98.47	97.06
Harris	1	936	93.90	1.71	90.27
Robinson Nuclear	2	758	104.08	18.13	52.17
Nuclear System Total		3,622	93.18	56.35	80.66
Total System		8,897	74.79	56.48	74.41

Amended SC Fuel Rule
Related to Nuclear Operations

There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation system if the utility achieved a net capacity factor of ≥ 92.5% during the 12 month period under review. For the test period March 1, 2010 through October 31, 2010, actual period to date performance is summarized below:

Period to Date: March 1, 2010 to October 31, 2010

Nuclear System Capacity Factor Calculation (Based on net generation)

A.. Nuclear system actual generation for SCPSC test period	A =	16,033,462 MWH
B. Total number of hours during SCPSC test period	B =	5,879 hours
C. Nuclear system MDC during SCPSC test period (see page 2)	C =	3,482 MW
D. Reasonable nuclear system reductions (see page 2)	D =	4,816,708 MWH

A. SC Fuel Case nuclear system capacity factor: [(A + D) / (B + C)] * 100 = 101.9%

NOTE:
If Line Item E > 92.5%, presumption of utility's minimum cost of operation.
If Line Item E < 92.5%, utility has burden of proof of reasonable operations.

Amended SC Fuel Rule
Nuclear System Capacity Factor Calculation
Reasonable Nuclear System Reductions
Period to Date: March 1, 2010 to October 31, 2010

Nuclear Unit Name and Designation	BNP Unit # 1	BNP Unit # 2	HNP Unit # 1	RNP Unit # 2	Nuclear System
Unit MDC	938 MW	920 MW	900 MW	724 MW	3,482 MW
Reasonable refueling outage time (MWH)	1,335,783	0	673,561	1,644,116	
Reasonable maintenance, repair, and equipment replacement outage time (MWH)	92,814	27,389	2,368	910,179	
Reasonable coast down power reductions (MWH)	0	0	7,476	0	
Reasonable power ascension power reductions (MWH)	55,192	464	0	21,363	
Prudent NRC required testing outages (MWH)	24,072	21,332	599	0	
SCPSC identified outages not directly under utility control (MWH)	0	0	0	0	
Acts of Nature reductions (MWH)	0	0	0	0	
Reasonable nuclear reduction due to low system load (MWH)	0	0	0	0	
Unit total excluded MWH	1,507,861	49,185	684,004	2,575,658	
Total reasonable outage time exclusions [carry to Page 1, Line D]					4,816,708